

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/541,892
Source: PCT
Date Processed by STIC: 06/06/2006

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 06/06/2006

PATENT APPLICATION: US/10/541,892

TIME: 10:28:05

Input Set : A:\21269P.TXT

Output Set: N:\CRF4\06062006\J541892.raw

```

4 <110> APPLICANT: Mosley, Ralph T.
5     McKeever, Brian Michael
6     Berger, Joel P.
8 <120> TITLE OF INVENTION: PEROXISOME PROLIFERATOR-ACTIVATED
9     RECEPTOR
11 <130> FILE REFERENCE: 21269P
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/541,892
C--> 13 <141> CURRENT FILING DATE: 2005-07-08
13 <150> PRIOR APPLICATION NUMBER: PCT/US2004/001221
14 <151> PRIOR FILING DATE: 2004-01-16
16 <150> PRIOR APPLICATION NUMBER: 60/441,836
17 <151> PRIOR FILING DATE: 2003-01-22
19 <160> NUMBER OF SEQ ID NOS: 12
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 468
25 <212> TYPE: PRT
26 <213> ORGANISM: Human
28 <400> SEQUENCE: 1
29 Met Val Asp Thr Glu Ser Pro Leu Cys Pro Leu Ser Pro Leu Glu Ala
30 1 5 10 15
31 Gly Asp Leu Glu Ser Pro Leu Ser Glu Phe Leu Gln Glu Met Gly
32 20 25 30
33 Asn Ile Gln Glu Ile Ser Gln Ser Ile Gly Glu Asp Ser Ser Gly Ser
34 35 40 45
35 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly Ser Asp
36 50 55 60
37 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro Ser Ser
38 65 70 75 80
39 Val Thr Tyr Pro Val Val Pro Gly Ser Val Asp Glu Ser Pro Ser Gly
40 85 90 95
41 Ala Leu Asn Ile Glu Cys Arg Ile Cys Gly Asp Lys Ala Ser Gly Tyr
42 100 105 110
43 His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg
44 115 120 125
45 Thr Ile Arg Leu Lys Leu Val Tyr Asp Lys Cys Asp Arg Ser Cys Lys
46 130 135 140
47 Ile Gln Lys Lys Asn Arg Asn Lys Cys Gln Tyr Cys Arg Phe His Lys
48 145 150 155 160
49 Cys Leu Ser Val Gly Met Ser His Asn Ala Ile Arg Phe Gly Arg Met
50 165 170 175
51 Pro Arg Ser Glu Lys Ala Lys Leu Lys Ala Glu Ile Leu Thr Cys Glu
52 180 185 190

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53 His Asp Ile Glu Asp Ser Glu Thr Ala Asp Leu Lys Ser Leu Ala Lys
54      195      200      205
55 Arg Ile Tyr Glu Ala Tyr Leu Lys Asn Phe Asn Met Asn Lys Val Lys
56      210      215      220
57 Ala Arg Val Ile Leu Ser Gly Lys Ala Ser Asn Asn Pro Pro Phe Val
58 225      230      235      240
59 Ile His Asp Met Glu Thr Leu Cys Met Ala Glu Lys Thr Leu Val Ala
60      245      250      255
61 Lys Leu Val Ala Asn Gly Ile Gln Asn Lys Glu Ala Glu Val Arg Ile
62      260      265      270
63 Phe His Cys Cys Gln Cys Thr Ser Val Glu Thr Val Thr Glu Leu Thr
64      275      280      285
65 Glu Phe Ala Lys Ala Ile Pro Gly Phe Ala Asn Leu Asp Leu Asn Asp
66      290      295      300
67 Gln Val Thr Leu Leu Lys Tyr Gly Val Tyr Glu Ala Ile Phe Ala Met
68 305      310      315      320
69 Leu Ser Ser Val Met Asn Lys Asp Gly Met Leu Val Ala Tyr Gly Asn
70      325      330      335
71 Gly Phe Ile Thr Arg Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Cys
72      340      345      350
73 Asp Ile Met Glu Pro Lys Phe Asp Phe Ala Met Lys Phe Asn Ala Leu
74      355      360      365
75 Glu Leu Asp Asp Ser Asp Ile Ser Leu Phe Val Ala Ala Ile Ile Cys
76      370      375      380
77 Cys Gly Asp Arg Pro Gly Leu Leu Asn Val Gly His Ile Glu Lys Met
78 385      390      395      400
79 Gln Glu Gly Ile Val His Val Leu Arg Leu His Leu Gln Ser Asn His
80      405      410      415
81 Pro Asp Asp Ile Phe Leu Phe Pro Lys Leu Leu Gln Lys Met Ala Asp
82      420      425      430
83 Leu Arg Gln Leu Val Thr Glu His Ala Gln Leu Val Gln Ile Ile Lys
84      435      440      445
85 Lys Thr Glu Ser Asp Ala Ala Leu His Pro Leu Leu Gln Glu Ile Tyr
86      450      455      460
87 Arg Asp Met Tyr
88 465
91 <210> SEQ ID NO: 2
92 <211> LENGTH: 441
93 <212> TYPE: PRT
94 <213> ORGANISM: Human
96 <400> SEQUENCE: 2
97 Met Glu Gln Pro Gln Glu Glu Ala Pro Glu Val Arg Glu Glu Glu Glu
98 1      5      10      15
99 Lys Glu Glu Val Ala Glu Ala Glu Gly Ala Pro Glu Leu Asn Gly Gly
100      20      25      30
101 Pro Gln His Ala Leu Pro Ser Ser Ser Tyr Thr Asp Leu Ser Arg Ser
102      35      40      45
103 Ser Ser Pro Pro Ser Leu Leu Asp Gln Leu Gln Met Gly Cys Asp Gly
104      50      55      60

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105 Ala Ser Cys Gly Ser Leu Asn Met Glu Cys Arg Val Cys Gly Asp Lys
106 65              70              75              80
107 Ala Ser Gly Phe His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly
108              85              90              95
109 Phe Phe Arg Arg Thr Ile Arg Met Lys Leu Glu Tyr Glu Lys Cys Glu
110              100             105             110
111 Arg Ser Cys Lys Ile Gln Lys Lys Asn Arg Asn Lys Cys Gln Tyr Cys
112              115             120             125
113 Arg Phe Gln Lys Cys Leu Ala Leu Gly Met Ser His Asn Ala Ile Arg
114              130             135             140
115 Phe Gly Arg Met Pro Glu Ala Glu Lys Arg Lys Leu Val Ala Gly Leu
116 145              150              155              160
117 Thr Ala Asn Glu Gly Ser Gln Tyr Asn Pro Gln Val Ala Asp Leu Lys
118              165              170              175
119 Ala Phe Ser Lys His Ile Tyr Asn Ala Tyr Leu Lys Asn Phe Asn Met
120              180             185             190
121 Thr Lys Lys Lys Ala Arg Ser Ile Leu Thr Gly Lys Ala Ser His Thr
122              195             200             205
123 Ala Pro Phe Val Ile His Asp Ile Glu Thr Leu Trp Gln Ala Glu Lys
124              210             215             220
125 Gly Leu Val Trp Lys Gln Leu Val Asn Gly Leu Pro Pro Tyr Lys Glu
126 225              230              235              240
127 Ile Ser Val His Val Phe Tyr Arg Cys Gln Cys Thr Thr Val Glu Thr
128              245             250             255
129 Val Arg Glu Leu Thr Glu Phe Ala Lys Ser Ile Pro Ser Phe Ser Ser
130              260             265             270
131 Leu Phe Leu Asn Asp Gln Val Thr Leu Leu Lys Tyr Gly Val His Glu
132              275             280             285
133 Ala Ile Phe Ala Met Leu Ala Ser Ile Val Asn Lys Asp Gly Leu Leu
134              290             295             300
135 Val Ala Asn Gly Ser Gly Phe Val Thr Arg Glu Phe Leu Arg Ser Leu
136 305              310             315             320
137 Arg Lys Pro Phe Ser Asp Ile Ile Glu Pro Lys Phe Glu Phe Ala Val
138              325             330             335
139 Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser Asp Leu Ala Leu Phe Ile
140              340             345             350
141 Ala Ala Ile Ile Leu Cys Gly Asp Arg Pro Gly Leu Met Asn Val Pro
142              355             360             365
143 Arg Val Glu Ala Ile Gln Asp Thr Ile Leu Arg Ala Leu Glu Phe His
144              370             375             380
145 Leu Gln Ala Asn His Pro Asp Ala Gln Tyr Leu Phe Pro Lys Leu Leu
146 385              390             395             400
147 Gln Lys Met Ala Asp Leu Arg Gln Leu Val Thr Glu His Ala Gln Met
148              405             410             415
149 Met Gln Arg Ile Lys Lys Thr Glu Thr Ser Leu His Pro Leu
150              420             425             430
151 Leu Gln Glu Ile Tyr Lys Asp Met Tyr
152              435             440
155 <210> SEQ ID NO: 3

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Input Set : A:\21269P.TXT

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156 <211> LENGTH: 477

157 <212> TYPE: PRT

158 <213> ORGANISM: Human

160 <400> SEQUENCE: 3

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161 Met Thr Met Val Asp Thr Glu Met Pro Phe Trp Pro Thr Asn Phe Gly
162 1 5 10 15
163 Ile Ser Ser Val Asp Leu Ser Val Met Glu Asp His Ser His Ser Phe
164 20 25 30
165 Asp Ile Lys Pro Phe Thr Thr Val Asp Phe Ser Ser Ile Ser Thr Pro
166 35 40 45
167 His Tyr Glu Asp Ile Pro Phe Thr Arg Thr Asp Pro Val Val Ala Asp
168 50 55 60
169 Tyr Lys Tyr Asp Leu Lys Leu Gln Glu Tyr Gln Ser Ala Ile Lys Val
170 65 70 75 80
171 Glu Pro Ala Ser Pro Pro Tyr Tyr Ser Glu Lys Thr Gln Leu Tyr Asn
172 85 90 95
173 Lys Pro His Glu Glu Pro Ser Asn Ser Leu Met Ala Ile Glu Cys Arg
174 100 105 110
175 Val Cys Gly Asp Lys Ala Ser Gly Phe His Tyr Gly Val His Ala Cys
176 115 120 125
177 Glu Gly Cys Lys Gly Phe Phe Arg Arg Thr Ile Arg Leu Lys Leu Ile
178 130 135 140
179 Tyr Asp Arg Cys Asp Leu Asn Cys Arg Ile His Lys Lys Ser Arg Asn
180 145 150 155 160
181 Lys Cys Gln Tyr Cys Arg Phe Gln Lys Cys Leu Ala Val Gly Met Ser
182 165 170 175
183 His Asn Ala Ile Arg Phe Gly Arg Met Pro Gln Ala Glu Lys Glu Lys
184 180 185 190
185 Leu Leu Ala Glu Ile Ser Ser Asp Ile Asp Gln Leu Asn Pro Glu Ser
186 195 200 205
187 Ala Asp Leu Arg Ala Leu Ala Lys His Leu Tyr Asp Ser Tyr Ile Lys
188 210 215 220
189 Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg Ala Ile Leu Thr Gly Lys
190 225 230 235 240
191 Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr Asp Met Asn Ser Leu Met
192 245 250 255
193 Met Gly Glu Asp Lys Ile Lys Phe Lys His Ile Thr Pro Leu Gln Glu
194 260 265 270
195 Gln Ser Lys Glu Val Ala Ile Arg Ile Phe Gln Gly Cys Gln Phe Arg
196 275 280 285
197 Ser Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Ser Ile Pro
198 290 295 300
199 Gly Phe Val Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu Lys Tyr
200 305 310 315 320
201 Gly Val His Glu Ile Tyr Thr Met Leu Ala Ser Leu Met Asn Lys
202 325 330 335
203 Asp Gly Val Leu Ile Ser Glu Gly Gln Gly Phe Met Thr Arg Glu Phe
204 340 345 350
205 Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp Phe Met Glu Pro Lys Phe

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```

206          355          360          365
207 Glu Phe Ala Val Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser Asp Leu
208          370          375          380
209 Ala Ile Phe Ile Ala Val Ile Ile Leu Ser Gly Asp Arg Pro Gly Leu
210 385          390          395          400
211 Leu Asn Val Lys Pro Ile Glu Asp Ile Gln Asp Asn Leu Leu Gln Ala
212          405          410          415
213 Leu Glu Leu Gln Leu Lys Leu Asn His Pro Glu Ser Ser Gln Leu Phe
214          420          425          430
215 Ala Lys Leu Leu Gln Lys Met Thr Asp Leu Arg Gln Ile Val Thr Glu
216          435          440          445
217 His Val Gln Leu Leu Gln Val Ile Lys Lys Thr Glu Thr Asp Met Ser
218          450          455          460
219 Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp Leu Tyr
220 465          470          475
223 <210> SEQ ID NO: 4
224 <211> LENGTH: 275
225 <212> TYPE: PRT
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: mutated PPAR ligand binding domain
W--> 231 <221> NAME/KEY: VARIANT
232 <222> LOCATION: 271
233 <223> OTHER INFORMATION: Xaa = alanine, valine, leucine, isoleucine,
234      proline, tryptophan, phenylalanine, methionine,
235      histidine, asparagine, or glutamine
W--> 237 <400> 4
238 Gln Leu Asn Pro Glu Ser Ala Asp Leu Arg Ala Leu Ala Lys His Leu
239 1          5          10          15
240 Tyr Asp Ser Tyr Ile Lys Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg
241          20          25          30
242 Ala Ile Leu Thr Gly Lys Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr
243          35          40          45
244 Asp Met Asn Ser Leu Met Met Gly Glu Asp Lys Ile Lys Phe Lys His
245          50          55          60
246 Ile Thr Pro Leu Gln Glu Gln Ser Lys Glu Val Ala Ile Arg Ile Phe
247 65          70          75          80
248 Gln Gly Cys Gln Phe Arg Ser Val Glu Ala Val Gln Glu Ile Thr Glu
249          85          90          95
250 Tyr Ala Lys Ser Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln
251          100         105         110
252 Val Thr Leu Leu Lys Tyr Gly Val His Glu Ile Ile Tyr Thr Met Leu
253          115         120         125
254 Ala Ser Leu Met Asn Lys Asp Gly Val Leu Ile Ser Glu Gly Gln Gly
255          130         135         140
256 Phe Met Thr Arg Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp
257 145         150         155         160
258 Phe Met Glu Pro Lys Phe Glu Phe Ala Val Lys Phe Asn Ala Leu Glu
259          165         170         175

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/541,892

DATE: 06/06/2006
TIME: 10:28:06

Input Set : A:\21269P.TXT
Output Set: N:\CRF4\06062006\J541892.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 271

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/541,892

DATE: 06/06/2006

TIME: 10:28:06

Input Set : A:\21269P.TXT

Output Set: N:\CRF4\06062006\J541892.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:231 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:256